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Babak Tehranchi

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08/26/2004

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EXAMINER

LEE, TOMMY D

ART UNIT

PAPER NUMBER

2624

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/640,972

Applicant(s)

TEHRANCHI ET AL.

Examiner

Thomas D. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 46-49 is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office action is responsive to applicant's amendment filed May 24, 2004.
Claims 1-49 are pending.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-3, 25-27, 31-33, 38, 39, 41 and 43-45 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,754,308 (Lopresti et al.).

Regarding claim 1, Lopresti et al. teach an output print produced by an image processing apparatus, comprising: a substrate having an image thereon (noting Fig. 5, output of either perfect copy 110 or ordinary copy 115); and a machine readable marking coupled to said substrate, wherein said machine readable marking identifies a data source (DocId, indicating file containing a digital representation of the page to be retrieved, printed on re-created page (column 4, lines 29-49)).

Regarding claim 2, Lopresti et al. teach an output print produced by an image processing apparatus, comprising: a substrate having an image thereon (noting Fig. 5, output of either perfect copy 110 or ordinary copy 115); and a machine readable marking coupled to said substrate, wherein said machine readable marking identifies at least one processing parameter employed by the image processing apparatus to process the image provided the data source (DocId further provides information regarding photocopying and facsimile reproduction parameters (column 5, lines 12-33)).

Regarding claim 3, Lopresti et al. teach an output print produced by an image processing apparatus, comprising: a substrate having an image thereon (noting Fig. 5, output of either perfect copy 110 or ordinary copy 115); and a machine readable marking coupled to said substrate, wherein said machine readable marking machine identifies a data source used to provide the image and identifies at least one processing parameter employed by the image processing apparatus to process the image provided by the data source (DocId, indicating file containing a digital representation of the page to be retrieved, printed on re-created page (column 4, lines 29-49); DocId further provides information regarding photocopying and facsimile reproduction parameters (column 5, lines 12-33)).

Regarding claim 25, Lopresti et al. teach a machine-readable marking on an output print having an image thereon produced by an image processing apparatus, said marking comprising encoded metadata describing the image, said metadata including an identifier defining a data source used to provide the image on the output print (DocId, indicating file containing a digital representation of the page to be retrieved, printed on re-created page (column 4, lines 29-49)).

Regarding claim 26, Lopresti et al. teach a machine-readable marking on an output print having an image thereon produced by an image processing apparatus, said marking comprising encoded metadata describing the image, said metadata including an identifier defining a processing operation used to process the image on the output print (DocId further provides information regarding photocopying and facsimile reproduction parameters (column 5, lines 12-33)).

Regarding claim 27, Lopresti et al. teach a machine-readable marking on an output print having an image thereon produced by an image processing apparatus, said marking comprising encoded metadata describing the image, said metadata including an identifier defining a data source used to provide the image on the output print (DocId, indicating file containing a digital representation of the page to be retrieved, printed on re-created page (column 4, lines 29-49)) and defining a processing operation used to process the image on the output print (DocId further provides information regarding photocopying and facsimile reproduction parameters (column 5, lines 12-33)).

Regarding claim 31, Lopresti et al. teach a method for coupling, to an output print, metadata describing an image generated from a data source, the method comprising the step of marking a machine-readable encoding on the output print, the encoding identifying the data source (DocId, indicating file containing a digital representation of the page to be retrieved, printed on re-created page (column 4, lines 29-49)).

Regarding claim 32, Lopresti et al. teach a method for coupling, to an output print, metadata describing an image generated from a data source, the method comprising the step of marking a machine-readable encoding on the output print, the encoding defining a processing operation used to process the image on the output print (DocId further provides information regarding photocopying and facsimile reproduction parameters (column 5, lines 12-33)).

Regarding claim 33, Lopresti et al. teach a method for coupling, to an output print, metadata describing an image generated from a data source, the method

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comprising the step of marking a machine-readable encoding on the output print, the encoding identifying the data source (DocId, indicating file containing a digital representation of the page to be retrieved, printed on re-created page (column 4, lines 29-49)) and defining a processing operation used to process the image on the output print (DocId further provides information regarding photocopying and facsimile reproduction parameters (column 5, lines 12-33)).

Regarding claim 38, Lopresti et al. teach a method for marking identification data on an output print produced from a data source by an image processing apparatus, the method comprising the step of marking a machine-readable encoding that identifies the data source (DocId, indicating file containing a digital representation of the page to be retrieved, printed on re-created page (column 4, lines 29-49)).

Regarding claim 39, Lopresti et al. teach a method for marking processing data on an output print produced from a data source by an image processing apparatus, the method comprising the step of marking a machine-readable encoding that identifies at least one processing parameter used by the image processing apparatus to process the output print from the data source (DocId further provides information regarding photocopying and facsimile reproduction parameters (column 5, lines 12-33)).

Regarding claim 41, Lopresti et al. teach, for use with an image processing apparatus, a method for producing a first output from a data source, the method comprising the steps of obtaining, from a machine-readable marking on a second output print, a processing parameter for use by the image processing apparatus (DocId provides information regarding photocopying and facsimile reproduction parameters

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(column 5, lines 12-33) from page 100 (column 9, lines 17-24)); generating a setup file having the processing parameter by using data obtained from the machine-readable marking (document with appended DocId transmitted to a storage location for archiving (column 8, lines 35-47)); and providing the setup file to the image processing apparatus (reproduction parameters used to produce an enhanced, high quality photocopy of the page (column 5, lines 12-26)).

Regarding claims 43-45, Lopresti et al. teach an image processing system for printing image data on a first output print, wherein the first output print is substantially identical to a second output print, said image processing system comprising: a first printer for providing the second output print (printer 13 linked to first computer and equipped to output document marker 27 with the printed version of a document (column 3, lines 55-57)); a reader for obtaining setup data coupled to said first output print (document scanner 16 adapted to scan the document marker, as well as or separate from scanning of characters on the document (column 3, lines 57-59)); and a second printer for accepting the image data as input and printing the first output print, said first printer capable of printing based on the setup data (optional printer linked to a second computer for outputting a printed second version (column 3, lines 63-65; column 4, lines 14-28)). The image processing system further comprises a transmission link that connects said first printer with said second printer (printers linked via document scanner 16, computer system 2 (Fig. 1)). Said reader is a scanner (document scanner (column 3, line 57)).

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 4-7, 13, 14, 17-24, 28, 34, 35-37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lopresti et al.

Regarding claims 4-6, Lopresti et al. teach an output print produced by an image processing apparatus, comprising a substrate having an image thereon (noting Fig. 5, output of either perfect copy 110 or ordinary copy 115); and a machine-readable marking coupled to said substrate, wherein said machine-readable marking identifies a data source and at least one processing parameter used to provide the image (DocId, indicating file containing a digital representation of the page to be retrieved, printed on re-created page (column 4, lines 29-49)) and identifying encoding to identify at least one processing parameter employed by the image processing apparatus to process the image provided by the data source (DocId further provides information regarding photocopying and facsimile reproduction parameters (column 5, lines 12-33)), and wherein said machine-readable marking is encoded (decoding of DocID (column 4, lines 6-8) indicates DocId was in encoded form prior to decoding).

Lopresti et al. do not appear to teach separate machine-readable markings for identifying the data source and processing parameters. However, whether a single or plural markings are used for identifying such information is inconsequential so long as the two pieces of information are identifiable by the markings. Providing separate markings would have been an obvious modification of Lopresti et al. for one of ordinary

skill in the art, so that a user may easily confirm that information identifying a data source and processing parameters are both included in the output print.

Regarding claims 13 and 14, Lopresti et al. teach a machine-readable marking comprising identifying encoding to identify at least one physical characteristic of said substrate (photocopying and facsimile reproduction parameters include paper size and paper quality (column 5, lines 15-18)). Once again, providing separate markings would have been an obvious modification of Lopresti et al. for one of ordinary skill in the art, so that a user may easily confirm that all identifying information is included in the output print.

Regarding claims 19-24, the machine-readable marking is affixed to said substrate by printing (as noted above, DocId is printed on re-created page). Printing second and third machine-readable markings would have been an obvious modification to one of ordinary skill in the art, as noted above.

Regarding claim 28, Lopresti et al. teach a machine-readable marking on an output print having an image thereon produced by an image processing apparatus, said marking comprising encoded metadata describing the image, said metadata including: an identifier defining a data source used to provide the image on the output print (DocId, indicating file containing a digital representation of the page to be retrieved, printed on re-created page (column 4, lines 29-49)) and a processing operation used to process the image on the output print (DocId further provides information regarding photocopying and facsimile reproduction parameters (column 5, lines 12-33)).

Regarding claim 34, Lopresti et al. teach a method for coupling, to an output print,

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metadata describing an image generated from a data source, the method comprising the step of marking machine-readable coding on the output print, the encoding identifying a data source (DocId, indicating file containing a digital representation of the page to be retrieved, printed on re-created page (column 4, lines 29-49)) and defining a processing operation used to process the image on the output print (DocId further provides information regarding photocopying and facsimile reproduction parameters (column 5, lines 12-33)). Regarding claim 40, Lopresti et al. teach a method for marking identification and processing data on an output print produced from a data source by an image processing apparatus, the method comprising the step of marking machine-readable encoding that identifies the data source (DocId, indicating file containing a digital representation of the page to be retrieved, printed on re-created page (column 4, lines 29-49)) and at least one processing parameter used by the image processing apparatus to process the output print from said data source (DocId further provides information regarding photocopying and facsimile reproduction parameters (column 5, lines 12-33)). Again, while not taught by Lopresti et al., providing separate markings would have been an obvious modification of Lopresti et al. for one of ordinary skill in the art, so that a user may easily confirm that all identifying information is included in the output print.

Regarding claims 7, 17 and 18, Lopresti et al. disclose types of reproduction parameters contained in the information encoded in the DocId, such as exposure levels, paper size and paper quality (column 5, lines 15-18). While not disclosed in Lopresti et al., it would have been obvious to one of ordinary skill in the art that other types of print

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processing, as a matter of design choice, may be communicated to a processing apparatus using an identifier such as the DocId taught by Lopresti et al. or other data such as bar codes. Prepress processing data or types of finishing mechanisms, including a laminator, are features which would have been obvious modifications of Lopresti et al. to one who desires such features.

Regarding claims 35-37, hash function values and digital signatures are well known and used in image data transmission and retrieval, and it would have been obvious for one of ordinary skill in the art to provide such information in the DocId information taught by Lopresti et al. for providing authentication and security to the image processing system.

6. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lopresti et al. as applied to claim 4 above, and further in view of U.S. Patent 5,644,408 (Li et al.). Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lopresti et al. as applied to claim 13 above, and further in view of Li et al. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lopresti et al. as applied to claim 28 above, and further in view of Li et al. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lopresti et al. as applied to claim 41 above, and further in view of Li et al.

Claims 10, 11, 16, 30 and 42 each recite a machine-readable marking using a bar code reader, and claim 12 recites a machine-readable marking that is invisible. The DocId information taught by Lopresti et al. is not disclosed as being a bar code. However, Li et al. teach the use of a bar code containing information for processing a

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document on which the bar code is printed (column 3, line 64 – column 4, line 3). The bar code is read by a scanner/decoder (column 4, lines 12-14). Bar codes containing information to be decoded by a bar code reader are well known in the art, and it would have been obvious for one of ordinary skill in the art to use bar codes for the DocId information taught by Lopresti et al., since bar coding is a convenient method for entering information into a data processing system. Furthermore, it is generally well known in the art to print a bar code using invisible ink on a document, and it would have been obvious for one of ordinary skill in the art to use invisible ink for printing the bar code so that the bar code may be read, while not interfering with the content of the document as viewed by a person.

7. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lopresti et al. as applied to claim 4 above, and further in view of U.S. Patent 6,426,806 (Melen). Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lopresti et al. as applied to claim 13 above, and further in view of Melen. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lopresti et al. as applied to claim 28 above, and further in view of Melen.

Claims 8, 9, 15 and 29 each recite a machine-readable marking that is human-readable. The DocId information taught by Lopresti et al. is not disclosed as being human-readable. However, Melen teaches the use of either human-readable characters or bar codes as information on a control sheet used for routing image data (column 2, lines 25-30). The human-readable characters are read by a scanning system, which is a machine. It would have been obvious to one of ordinary skill in the

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art to replace the DocId information in Lopresti et al. with human-readable characters, which are obviously easier for a user to read and which allows the user to positively identify a type of processing to be performed.

Allowable Subject Matter

8. Claims 46-49 are allowed.
9. The following is a statement of reasons for the indication of allowable subject matter: While Lopresti et al. disclose first and second printers and a reader as recited in claim 46, a remote proofing system comprising such features is not disclosed. Regarding claims 47-49, the prior art does not disclose reading first and second machine readable marks on respective first and second images, and comparing said first and second machine readable marks in order to determine if the first and second images are identical.

Response to Arguments

10. Applicant's arguments filed in response to the rejection of claims 1-45 under either 35 U.S.C. 102(b) or 35 U.S.C. 103(a) as set forth in the Office action mailed March 12, 2004 have been fully considered but they are not persuasive.

Regarding claims 1 and 2, applicant asserts, at page 12, lines 5-7 of the amendment, that Lopresti et al. do not disclose recording where data in file originated or how data was processed. However, the claims broadly recite "a data source," and do not require the data source to be a source where data in a file originated. Document database 32 is a data source. Also, the claims do not recite information regarding how data was processed. Furthermore, applicant acknowledges that Doc ID includes

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identification of a person who generated a page (page 12, lines 10-11 of amendment).

The claims do not require “data source” to be an apparatus such as a camera or scanner or other digitizing device.

Applicant further asserts that Lopresti et al. do not disclose identification of at least one processing parameter. The present application is more specific to proofing than to copying, and additional identical proofs are not created by Lopresti et al. (page 12, lines 26-34 of amendment). However, in Lopresti et al., DocID provides information regarding photocopying and facsimile reproduction parameters (column 5, lines 12-33). Whether processing parameters in the present application are “more substantial” than those disclosed by Lopresti et al. is inconsequential, for the claims merely require identification of a processing parameter. The substantiality of the parameters is not specified. Furthermore, the claims do not recite a particular use of the present application.

Applicant asserts that Lopresti et al. do not disclose using a DocID on a proof, or using a press as a copier, nor is disclosed putting an original document filename, location of file, and processing information used to print the file, into the DocID (page 13, lines 1-9 of amendment). However, with the exception of claim 46, the claims do not recite a proofing process, and merely require identification of at least one parameter.

Applicant asserts that the present invention uses a machine readable marking on a proof, and all of the claims refer to the creation of a proof (page 13, lines 10-29 of amendment). However, the claims merely recite creation of an “output print,” which is a

much broader limitation. Output prints with a machine readable marking are taught by Lopresti et al. Only claim 46 recites a remote proofing system.

Applicant asserts that Lopresti et al. do not include information on a source of digital data or processing steps (metadata), including camera information, scanner information or font information (page 14, line 16 – page 15, line 11 of amendment). However, metadata, as broadly defined as source and processing steps, reads on Lopresti et al. (document database 32 qualifies as a data source; photocopying and facsimile reproduction parameters qualify as processing steps).

Applicant asserts that hash functions are provided to guarantee that a second proof is identical to a first proof including the source of the digital information and the processing used to create the proof (page 15, lines 12-25 of amendment). However, the claims do not recite any specific purpose for the presence of hash functions on the image data. Applicant did not dispute the assertion made in the prior Office action that hash functions and digital signatures are well known and would be obvious to one skilled in the art to be included in the DocID described by Lopresti et al.

Applicant asserts that the address a disclosed in Lopresti et al. might contain a filename or point to a reference containing a filename, but a filename by itself may not indicate locations of a storage device that contains the file (page 16, lines 1-10 of the amendment). However, as mentioned above, the claims broadly recite "a data source," and do not require the data source to be a source where data in a file originated. Document database 32 is a data source. Also, the claims do not recite information regarding how data was processed. Furthermore, applicant acknowledges that Doc ID

includes identification of a person who generated a page (page 12, lines 10-11 of amendment). The claims do not require "data source" to be an apparatus such as a camera or scanner or other digitizing device.

Applicant asserts that the present invention does not claim means to access original stored digital information, but only discloses recording identity of data source (page 16, lines 11-16). However, what the present invention does *not* claim is irrelevant. What is relevant is what the present invention does claim, and whether what is claimed is disclosed or suggested by Lopresti et al.

Applicant argues that the data source of the present invention provides information about how a document was created (page 16, lines 17-28 of amendment). However, the claims do not recite a data source as providing such information.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas D. Lee whose telephone number is (703) 305-4870. The examiner can normally be reached on Monday-Friday (7:30-5:00), alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (703) 308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas D. Lee
Primary Examiner
Art Unit 2624

tdl
August 19, 2004